

HIGHLY IMPACT-RESISTANT STEEL PIPE  
AND METHOD FOR PRODUCING THE SAME

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ABSTRACT OF THE DISCLOSURE

10       The present invention provides: a highly impact-  
resistant member having a round or square sectional  
shape, that is excellent in strength and toughness, does  
not undergo the deterioration of toughness in the  
vicinity of the welded portion, and a highly impact-  
15       resistant steel pipe having a tensile strength TS of  
1,700 MPa or more and a yield ratio YR of 72% or less,  
said yield ratio being the ratio of a 0.1%-proof stress  
YS to a tensile strength TS (YS/TS). The toughness of  
the welded portion of said steel pipe is enhanced by  
controlling the Si amount in the steel of said steel pipe  
20       in the range from  $Mn/8 - 0.07$  to  $Mn/8 + 0.07$ . Said steel  
contains, in mass, 0.19 to 0.35% C, 0.10 to 0.30% Si, 0.5  
to 1.60% Mn, not more than 0.025% P, not more than 0.01%  
S, 0.010 to 0.050% Al, 2 to 35 ppm B and 0.005 to 0.05%  
Ti as indispensable components. Said steel pipe  
25       according to the present invention comprises a steel  
wherein 95% or more of the microstructure of said steel  
is transformed into martensite by subjecting said steel  
pipe to induction heating and then water quenching at a  
cooling rate of 100°C or higher and the prior austenite  
30       grain size number of said steel is #6 or more. The  
present invention includes methods for producing said  
steel pipe.